Would I do it again? Evolution to a new training paradigm

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I recently had the great fortune to participate in a NOVA television project called *This Emotional Life*. It was a 3-part series examining the science of human happiness. My story was featured in the third episode: ''Rethinking Happiness.'' I was, in the terminology of the day, an illegitimate child, and I grew up living with my mother and grandmother. My mother worked as a waitress to support us, and shortly after my grandmother's death (I was 10 years old), she married a retired career US Navy cook. Upon his arrival in our world, my mother's alcoholism dramatically surfaced, with my new stepfather's assistance of course, because he was also an alcoholic. My mother quit working and thereafter went through prolonged periods of heavy drinking ultimately leading to her never-ending cycles of being bedridden and malnourished, and coming close to death. After a trip to the hospital, discharge to home, and a period of being dry, the cycle would inevitably recur.

The result? I hit the streets, my friends became my family, and I was in constant trouble with the law. I was arrested a total of 24 times as a juvenile, and to avoid being tried as an adult with my next criminal offense, I joined the Navy and began the slow and arduous process of extricating myself from the world in which I grew up. My success today is the result of my efforts of course, but it could not have been done without a few key individuals who guided, prodded, and helped me at critical times.

In addition to my story, the same NOVA episode also featured an amazing man, Bob Shumaker, a Viet Nam veteran who spent many years as a prisoner of war (POW). In a study of Bob and other POWs, the interviewer asked the following question: If you could go back and erase the POW event from your life, would you? Surprisingly, the majority said ''no,'' despite the brutality and torture they endured. Bob said the experience had dramatically changed him and gave him perspective and insights that he thought were essential to his own personal development.

With reflection, I realized I felt the same about my personal experience growing up. It is an incredibly important part of who I am, how I see the world, and how I view people. Having surfaced from the other side of the tracks to an honored position in society gives me a near dual personality. It provides me with invaluable perspectives and insights for both the personal and professional parts of my life.

I then thought about surgical training and realized the obvious parallels. I finished 8 years of general surgical training in 1990 and my thoracic training in 1992, 10 years of my youth totally dedicated to surgical training. The world of surgical training in that era was one of survival of the fittest: incredibly long hours, little if any regard for the trainee's personal or emotional health, call rooms in janitors' closets, and the reality that you had to prove yourself day in and day out.

Yet, if I am asked if I could go back and eliminate that experience from my life, would I do so? Absolutely not. The primary demand of the previous surgical training paradigm was raw volume of work and the resilience to endure the process. I think most surgeons of this era fully recognize the value of their training experience: gaining proof of commitment, learning how to manage our physical fatigue, and learning that we were capable of much more than we thought. In other words, we proved our resilience. But we also recognize, whether openly or not (more likely the latter), that it came with a price. The process was dehumanizing, often mean-spirited, and typically devoid of any formal education in so many areas (ie, the 6 Accreditation Council for Medical Education competencies) critical to the development of a compassionate and effective surgeon. Those who lacked constructive resilience strategies may have ended up bitter, resentful, or with substance abuse problems. As a well-known cardiothoracic surgeon stated, ''There is no better stress reliever than a glass of scotch and 2 Percocet.''

''The good old days,'' however, are gone. The current training paradigm incorporates work hour restriction with potential for shift work and the 6 Accreditation Council for Medical Education competencies. The Institute of Medicine is suggesting even more draconian changes to work hours. These seismic shifts have been forced on the surgical education community, and many surgeons of my era, those currently responsible for educating the next generation of surgeons, are enduring the brunt of these changes.

How many times have I heard comments about today's residents not working as hard, being spoon-fed, not having the same commitment, and so forth? This is even more so for cardiothoracic surgery, which in the past was the ultimate test of training prowess. The result? Many surgeons, in effect, have thrown in the towel. Feeling that surgical training is now out of our control, we capitulate and simply accept the status quo. The end result? Our surgical graduates' competence will be a reflection of their mediocre training.

So how can we regain ''control'' of the training of our residents? In the process of considering this, I believe we should temporarily set aside or ignore the current regulatory

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environment (eg, work hours, competencies), take a step back, and develop a vision for the ideal graduate from a surgical training program. From this, we could then construct a rigorous, demanding, and relevant training program—one that leaves the joy of practicing medicine and surgery not only intact but also stronger. But, and here may be the tough part, it will be different than our training experience.

To accomplish this ambitious goal, we must abandon the very powerful nostalgic draw of the way we were trained. We need to look to other disciplines, such as the fields of education and business, for guidance. In other words, we need to think outside of our surgical box. And we need to focus on the patient. What surgeon product is the best for the patient? What attributes would we want in a surgeon caring for one of us?

To start this process and to be successful, we must first completely divorce ourselves from the embedded notion that the number of work hours, and lots of them, is the only true litmus test of a resident's physical and mental capabilities and commitment to the field. This issue is so profoundly central to our thinking, either overtly or subconsciously, that it prevents or clouds our openness to new ways of thinking or new ideas. Only after passing this hurdle will we be able to think clearly and search for new ways to construct an equally demanding, but different, training paradigm.

At the University of Minnesota Department of Surgery, we have begun replacing the litmus test of hours worked with the alternative paradigm of constant preparedness. Preparedness means to have the highest expectations of the resident to be prepared for every endeavor of daily work life: knowing the history of each patient, reading about all cases in advance, reviewing procedures before operating, and being prepared for conferences. The key here is to raise the bar high enough to produce a consistently demanding educational environment that requires the resident to perform at the highest level, in the same way that they were demanded to work long hours in the past. Through these demands, we remove the notion that once outside the 80-hour work week no work is necessary. Residents must use this free time to prepare and learn.

In parallel, we have begun a program of personal and professional development for residents and faculty. Notice the word ''faculty.'' It is remarkable how far behind we are in the world of medicine in this arena. The business world and all leadership institutes and organizations consider personal and professional development as a foundation of their enterprise. Through assessment and coaching they develop self-awareness and leadership skills in their employees, all to the benefit of their organizations. Yet in medicine, and especially in surgery, we somehow think that these skills are going to be obtained by osmosis or through the residents' own initiative.

Self-awareness is the foundation of outstanding leadership. The ability to reflect on one's own behavior and consider how it may interact constructively or destructively with others is a crucial determinant of an individual's success. As I have observed residents and faculty for the last 18 years, I have been constantly taken aback by the nonconstructive behaviors prevalent among surgeons and their impact on the morale and function of a division, department, residency, health care team, hospital, and ultimately our patients. As leaders and role models, it is our absolute responsibility to demonstrate self-awareness of our own behaviors and to adjust them appropriately.

We have instituted a program of self-awareness development that consists of administering the Meyers-Briggs Personality Inventory to all incoming residents, with subsequent coaching sessions. In addition, through the Center for Creative Leadership, we have developed a resident-specific 360-degree evaluation that is administered to second-year residents and repeated at the beginning of their fifth year. A dedicated group of faculty who have undergone similar 360-degree evaluations serve as mentors for the residents after the 360-degree evaluation. This has led to genuine mentoring relationships with the development of clear personal goals for the resident and observation by faculty over time. Residents and faculty have enjoyed this experience, and the results have had a dramatic influence on the individuals involved.

These 2 examples are just the start of the journey toward a new surgical training paradigm. Many other areas are in desperate need of attention: skills in communicating with families after surgery, delivering bad news to families and patients, developing empathic behaviors to demonstrate our concern and caring, performing public speaking (how many tortured lectures have you endured?), ensuring appropriate levels of resident autonomy (both operative and clinical), and many others. The list of neglected areas of education is long, with many opportunities for dramatic improvement.

However, here is the tough part: We are going to have to lead this endeavor. We will have to change the way we think, the way we do things, the way we see the world of the future. It will be difficult, but the future demands it. Our patients and our specialty demand that we train the surgeon of the future, one who is self-aware, who is a leader in his/her place of practice and specialty, and who has been inculcated with the intellectual rigor we demanded during his/her residency, much like work hours were demanded of us.